II. REMARKS

A. Introduction

The Office Action dated February 17, 1998 has been carefully reviewed and the foregoing amendments made in response thereto.

Claim 2, 6-8, 10, 12-14, 19-21, 25, 26, 29-32, and 34-36 are amended. Claims 2-43 are pending in the application.

Claims 21-24 are objected to because of informalities. Appropriate correction is required.

Claims 2-43 are rejected under 35 U.S.C. § 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention.

Claims 2-24 and 26-30 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention.

Claims 2-4, 6-7, 13, 17-18, and 20 stand rejected under 35 U.S.C. § 102 (b) as being anticipated USP 3,803,491 to Osborn, hereinafter Osborn '491.

Claims 21-24 stand rejected under 35 U.S.C. § 102 (b) as being anticipated by USP 4,225,884 to Block, hereinafter Block '884.

Claims 25-27, 36, 37, and 40-43 are rejected under 35 U.S.C. § 102 (b) as being anticipated by USP 4,536,791 to Campbell, hereinafter Campbell '791.

Claims 5, 8-12, 14-16, and 19 are rejected under 35 U.S.C. § 103 (a) as being unpatentable over Osborn '491.

Claim 28 is rejected under 35 U.S.C. § 103 (a) as being unpatentable over Campbell '791 in view of USP 4,381,522 to Lambert , hereinafter Lambert '522.

Claims 31-35, 38, and 39 are rejected under 35 U.S.C. § 103 (a) as being unpatentable over Campbell '791.

Claims 2-43 remain active in this application. No new matter is presented in the foregoing amendments. Approval and entry of same is respectfully requested.

B. Response to Requirement Imposed Upon Applicants to Resolve Alleged Conflicts Between Applicants' Applications.

Applicants respectfully traverse the requirements of the Office Action paragraph 5.

Paragraph 5 of the Office Action requires Applicants to either:

(1) file terminal disclaimers in each of the related 328 applications terminally disclaiming each of the other 327 applications; or

(2) provide an affidavit attesting to the fact that all claims in the 328 applications have been reviewed by applicant and that no conflicting claims exist between the applications; or

(3) resolve all conflicts between claims in the related 328 applications by identifying how all the claims in the instant application are distinct and separate inventions from all the claims in the above identified 328 applications.

In addition, Examiner states that failure to comply with any one of these requirements will result in abandonment of the application.

Examiner states that the requirement has been made because conflicts exist between claims of the related co-pending applications, including the present application. Examiner sets forth only the serial numbers of the co-pending applications without an indication of which claims are conflicting. Examiner has also attached an Appendix providing what is deemed to be clear evidence that conflicting claims exist between the 328 related co-pending applications and the present application. Further, Examiner states that an analysis of all claims in the 328 related co-pending applications would be an extreme burden on the Office requiring millions of claim comparisons.

Applicants respectfully traverse these requirements in that Examiner has both improperly imposed the requirements, and has incorrectly indicated that abandonment will occur upon failure to comply with the requirement. Applicants' traversal is supported by the fact that 37 C.F.R. § 1.78 (b) does not, under the present circumstances, provide Examiner with authority to

require Applicants to either: 1) file terminal disclaimers; 2) file an affidavit; or 3) resolve all apparent conflicts. Additionally, the penalty of abandonment of the instant application for failure to comply with the aforementioned requirement is improper for being outside the legitimate authority to impose abandonment upon an application. The following remarks in Section (B) will explain Applicants' basis for this traversal.

1. The PTO's New Requirement is an Unlawfully Promulgated Substantive Rule Outside the Commissioner's Statutory Grant of Power

The PTO Commissioner obtains his statutory rulemaking authority from the Congress through the provisions of Title 35 of the United States Code. The broadest grant of rulemaking authority -- 35 U.S.C. § 6 (a) -- permits the Commissioner to promulgate regulations directed only to "the conduct of proceedings in the [PTO]". This provision does NOT grant the Commissioner authority to issue substantive rules of patent law. Animal Legal Defense Fund v. Quigg, 932 F.2d 920, 930, 18 USPQ2d 1677, 1686 (Fed. Cir. 1991).[1] Applicants respectfully submit that the Examiner's creation of a new set of requirements based upon 37 CFR § 1.78(b) constitutes an unlawful promulgation of a substantive rule in direct contradiction of a long-established statutory and regulatory scheme.

2. The PTO's Requirement is a Substantive Rule

The first determination is whether the requirement as imposed by the PTO upon Applicants is substantive or a procedural rule. The Administrative Procedure Act offers general guidelines under which all administrative agencies must operate. A fundamental premise of administrative law is that administrative agencies must act solely within their statutory grant of power. *Chevron v. Natural Resources Defense Council*, 467 U.S. 837 (1984). The PTO Commissioner has NOT been granted power to promulgate substantive rules of patent law.

---

[1]Accord Hoechst Aktiengesellschaft v. Quigg, 917 F.2d 522, 526, 16 USPQ2d 1549, 1552 (Fed. Cir. 1990); Glaxo Operations UK Ltd. v. Quigg, 894 F.2d 392, 398-99, 13 USPQ2d 1628, 1632-33 (Fed. Cir. 1990); Ethicon Inc. v. Quigg, 849 F.2d 1422, 1425, 7 USPQ2d 1152, 1154 (Fed. Cir 1988).

Merck & Co., Inc. v. Kessler, 80 F.3d 1543 (Fed. Cir. 1996), citing, *Animal Legal Defense Fund v. Quigg*, 932 F.2d 920, 930, 18 USPQ2d 1677, 1686 (Fed. Cir. 1991).

The appropriate test for such a determination is an assessment of the rule' s impact on the Applicants' rights and interests under the patent laws. *Fressola v. Manbeck*, 36 USPQ2d 1211, 1215 (D.D.C. 1995). As the PTO Commissioner has no power to promulgate substantive rules, the Commissioner receives no deference in his interpretation of the statutes and laws that give rise to the instant requirement. *Merck & Co., Inc. v. Kessler*, 80 F.3d 1543 (Fed. Cir. 1996), citing, *Chevron v. Natural Resources Defense Council*, 467 U.S. 837 (1984). When agency rules either (a) depart from existing practice or (b) impact the substantive rights and interests of the effected party, the rule must be considered substantive. *Nat'l Ass'n of Home Health Agencies v. Scheiker*, 690 F.2d 932, 949 (D.C. Cir. 1982), *cert. denied*, 459 U.S. 1205 (1983).

a. The PTO Requirement is Substantive Because it Radically Changes Long Existing Patent Practice by Creating a New Requirement Upon Applicants Outside the Scope of 37 C.F.R. § 1.78 (b)

The Examiner's requirement is totally distinguishable from the well articulated requirement authorized by 37 CFR § 1.78 (b), because it (1) creates and imposes a new requirement to avoid abandonment of the application based on the allegation that conflicts exist between claims of the related 328 co-pending applications, and (2) it results in an effective double patenting rejection without the PTO's affirmative double patenting rejection of the claims. Long existing patent practice recognizes only two types of double patenting, double patenting based on 35 U.S.C. § 101 (statutory double patenting) and double patenting analogous to 35 U.S.C. § 103 (the well-known obviousness type double patenting).[2] These two well

[2]MPEP § 804(B)(1) states, in an admittedly awkward fashion, that the inquiry for obviousness type double patenting is analogous to a rejection under 35 U.S.C. 103: "since the analysis employed in an obvious-type double patenting determination parallels the guidelines for a 35 U.S.C. 103 rejection, the factual inquires set forth in Graham v. John Deere Co., 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103 are employed when making an obvious-type double patenting analysis".

established types of double patenting use an objective standard to determine when they are appropriate[3] and have a determinable result on the allowability of the pending claims.

The Examiner's new requirement represents a radical departure from long existing patent practice relevant to conflicting claims between co-pending applications of the same inventive entity. Two well established double patenting standards are based on an objective analysis of comparing pending and *allowed* claims. However, in the present application, there are no *allowed* claims. The Examiner's new requirement to avoid a double patenting rejection presumes that conflicts exist between claims in the present application and claims in the 327 copending applications. This presumption of conflicts between claims represents a radical departure from long existing patent practice as defined by 37 C.F.R. § 1.78 (b), which states:

> Where two or more applications filed by the same applicant contain conflicting claims, elimination of such claims from all but one application may be required in the absence of good and sufficient reason for their retention during pendency in more than one application.

Clearly, the only requirement authorized by the rule is the elimination of conflicting claims from all but one application where conflicting claims have been determined to exist. Furthermore, in order to determine that conflicting claims do in fact exist in multiple applications, the only possible analysis is obviousness-type double patenting, since there are no allowed or issued claims by which to employ the 35 U.S.C. § 101 statutory double patenting analysis. Once obviousness-type double patenting analysis has been applied and conflicting claims have been determined to exist, only a *provisional* obviousness-type double patenting rejection is possible until claims from one application are allowed.

In summary, the Examiner's new requirement departs from long-established practice because it (1) creates and imposes a new requirement to avoid abandonment of the application

---

[3] The objective test for same invention double patenting is whether one of the claims being compared could be literally infringed without literally infringing the other. The objective test for obviousness type double patenting is the same as the objective nonobviousness requirement of patentability with the difference that the disclosure of the first patent may not be used as prior art.

based on the allegation that conflicts exist between claims of the related 328 co-pending applications, and (2) it results in an effective double patenting rejection without the PTO's affirmative double patenting rejection of the claims.

Therefore, the Examiner's new requirement departs from existing practice and therefore is a **substantive rule** beyond the authority of the PTO and is therefore, invalid.

b. The New Requirement is Also a Substantive Rule Because it Adversely Impacts the Rights and Interests of Applicants to Benefits of the Patent

The rights and benefits of a U.S. patent is solely a statutory right. *Merck & Co., Inc. v. Kessler*, 80 F.3d 1543 (Fed. Cir. 1996). The essential statutory right in a patent is the right to exclude others from making, using and selling the claimed invention during the term of the patent. Courts have recognized that sometimes new procedural rules of the PTO are actually substantive rules, e.g. when the new rule made a substantive difference in the ability of the applicant to claim his discovery. *Fressola v. Manbeck*, 36 USPQ2d 1211, 1214 (D.D.C. 1995) (emphasis added), citing, *In re Pilkington*, 411 F.2d 1345, 1349; 162 USPQ 145 (CCPA 1969); and *In re Steppan*, 394 F.2d 1013, 1019; 156 USPQ 143 (CCPA 1967).

The new requirement, on its face and as applied here, is an instance of a PTO rule making a substantive difference in Applicants' ability to claim their invention and, therefore, must be considered a substantive rule. The requirement denies Applicants rights and benefits expressly conferred by the patent statute. The measure of the value of these denied rights and benefits is that the requirement, as applied here, would deny Applicants the full and complete PTO examination of Applicants' claims on their merits, as specified by 37 C.F.R. § 1.105. In addition, to file terminal disclaimers in each of the related 328 applications terminally disclaiming each of the other 327 applications based on the PTO's incomplete examination on the merits would deny Applicants the benefit of the full patent term of 17 years on each of Applicants' respective applications. Applicants respectfully submit that the requirement has a huge impact on their rights and interests in the presently claimed invention.

c. Conclusion: Substantive Rule

In summary, the requirement is a change to long existing practice and/or has a substantive impact on the rights and interests of Applicants to their invention. Either finding means that the new requirement is a substantive rule. Since the Commissioner has no power to issue substantive rules, the requirement is an improperly promulgated substantive rule having no force of law.

3. The PTO Requirement is Outside the Scope of 37 C.F.R. § 1.78 (b)

Rule 78 (b) states that:

> Where two or more applications filed by the same applicant contain conflicting claims, elimination of such claims from all but one application may be required in the absence of good and sufficient reason for their retention during pendency in more than one application.

The only **requirement** that Rule 78 (b) authorizes is the elimination of conflicting claims from all but one co-pending applications.

In the instant Office Action, Examiner has not required the elimination of all conflicting claims from all but one application, but instead has required Applicants to: 1) file terminal disclaimers in each of the related 328 applications; 2) provide an affidavit; or 3) resolve all conflicts between claims in the related 328 applications. None of the options in the requirement is authorized by Rule 78 (b), and therefore Applicants respectfully submit that such a requirement is improper.

With respect to the PTO's authority to act within Rule 78 (b) regarding the rejection of conflicting claims, MPEP § 822.01 states that:

> Under 37 CFR § 1.78 (b), the practice relative to overlapping claims in applications copending before the examiner..., is as follows: Where claims in one application are unpatentable over claims of another application of the same inventive entity because they recite the same invention, *a complete examination should be made of the claims of each application* and all appropriate rejections should be entered in each application, including rejections based upon prior art. *The claims of each application may also be rejected on the grounds of* ***provisional*** *double patenting on the claims of the other application* whether or not any claims

avoid the prior art. Where appropriate, the same prior art may be relied upon in each of the applications. MPEP 822.01 (6th Ed., Rev. 3, 1997), (*emphasis added*).

In light of the requirement of the Office Action, MPEP § 822.01 and 37 CFR § 1.78 (b) are not applicable since there has not been any rejection with regard to the elimination of conflicting claims from all but one co-pending application.

4. The Assertion That Failure to Comply with the Requirement Will Result in Abandonment of Applicants' Application is Improper

Applicants' prospective failure to comply with the above requirements cannot properly result in abandonment of the present application. Applicants respectfully submit that abandonment of an application can properly occur only:

(1) for failure to respond within a provided time period (under Rule 135);

(2) as an express abandonment (under Rule 138); or

(3) the result of failing to timely pay the issue fee (under Rule 316).

There is no provision in the rules permitting abandonment for failure to comply with any of the presented requirements. To impose an improper requirement upon Applicants and then hold the application is to be abandoned for failure to comply with the improper requirement violates the rules of practice before the USPTO. Furthermore, Examiner is in effect attempting to create a substantive rule which is above and beyond the rulemaking authority of the USPTO, and therefore is invalid.

In the *Application of Mott,* 539 F.2d 1291, 190 USPQ 536 (CCPA 1976), the applicant had conflicting claims in multiple applications. The CCPA held that action by the Examiner which would result in automatic abandonment of the application was legally untenable. *Id.* at 1296, 190 USPQ at 541. In the present application, Examiner has asserted that there are conflicting claims in multiple applications, and that non-compliance of the Office Action's requirement will result in an automatic abandonment. Therefore, under *Mott's* analysis, the Office Action's result of abandonment of Applicants' application is legally untenable.

5. Response to Apparent Conflict of Claims

Applicants submit that the presentation of the Office Action Appendix fails to demonstrate any conflicts between claims of the present application and claims of the co-pending applications. Rather, the Office Action Appendix compares representative claims of *other* applications in attempt to establish that "conflicting claims exist between the 328 related co-pending applications." Absent any evidence of conflicting claims between the Applicants' present application and any other of Applicants' co-pending applications, any requirement imposed upon Applicants to resolve such alleged conflicts is improper.

6. Request for Withdrawal of Requirement

Therefore, Applicants respectfully request that Examiner reconsider and withdraw the requirement that Applicants: (1) file terminal disclaimers in each of the related 328 applications terminally disclaiming each of the other 327 applications; (2) provide an affidavit attesting to the fact that all claims in the 328 applications have been reviewed by applicant and that no conflicting claims exist between the applications; or (3) resolve all conflicts between claims in the above identified 328 applications by identifying how all the claims in the instant application are distinct and separate inventions from all the claims in the above identified 328 applications, which upon failing to do so will abandon the application.

7. Filing of Supplemental Oath

Notwithstanding the foregoing, Applicants will file a supplemental oath under 37 C.F.R. § 1.67 for each application when Examiner identifies allowable subject matter. Applicants respectfully propose that the filing of individual supplemental oaths attesting to the absence of claim conflicts between previously patented claims and subsequently allowed claims is a more reasonable method of ensuring the patentable distinctness of subsequently allowed claims.

Under 37 C.F.R. § 1.105, § 1.106 & § 1.78 (b), Examiner has the duty to make every applicable rejection, including double patenting rejection. Failure to make every proper rejection denies Applicants all rights and benefits related thereto, e.g., Applicants' right to appeal, etc.

Once obviousness-type double patenting analysis has been applied and conflicting claims have been determined to exist, only a *provisional* obviousness-type double patenting rejection is possible until claims from one application are allowed.

C. Information Disclosure Statement

The Applicants appreciate the Examiner's review of the Information Disclosure Statements filed 4/7/97 and have addressed those specific concerns raised in paragraph 6 of the Office Action. It is the Applicants' understanding that the Examiner raised the following 5 issues:

(1) the reasons for such a large number of references cited,

(2) foreign language references cited without a statement of relevance or translation have not been considered,

(3) the relevancy of numerous references listed in the Information Disclosure Statements are subsequent to the Applicants' latest effective filing date,

(4) citation of references apparently unrelated to the subject matter of the claimed invention, and

(5) citation of database search results listed in foreign languages where no copy was provided.

1. Reason for Citation of Large Number of References

The reason that the Applicants submitted such a large number of references in the Information Disclosure Statements was that a large portion of the information cited by the Applicants was brought to the Applicants' attention in the discovery processes in a previous litigation in the United States District Court for the Eastern District of Virginia (*Personalized Mass Media Corp. v. The Weather Channel, Inc.* Docket No. 2:95 cv 242) and an investigation by the International Trade Commission (*In the Matter of Certain Digital Satellite System (DSS) Receivers And Components Thereof,* No. 337 TA 392, which was direct to U.S. Pat. No. 5,335,277) regarding claims in the Applicants' related issued patents. The documents listed in

the Information Disclosure Statement were cited during the previous litigation/investigative proceedings by the alleged infringers in the aforementioned proceedings as being relevant and material to patentability of the claims in the related patents. The Applicants submitted those materials in the Information Disclosure Statement to the PTO at the earliest possible time in order to file them in compliance with the 3 month requirement stated in the certification used to submit the Information Disclosure Statement before the Office Action was issued as is necessary under 37 CFR § 1.97 (c) (1). In such haste, entries were inadvertently submitted which do not appear on their face to be material to the patentability of the present application. Applicants have corrected this error with the submission of the corrected Information Disclosure Statement as shown in Appendix B. However, it is the Applicants' understanding that not all references cited must be material to patentability in order for such references to be considered. In § 609 of the MPEP, it states,

> "[t]hese individuals also may want the Office to consider information for a variety of reasons: e.g., without first determining whether the information meets any particular standard of materiality, or because another patent office considered the information to be relevant in a counterpart or related patent application filed in another country, or to make sure that the examiner has an opportunity to consider the same information that was considered by the individuals that were substantially involved in the preparation or prosecution of a patent application."

Applicants' position is that information that was considered material in previous litigation would fall into the 'variety of reasons' category as stated above. Applicants intention was not to confuse or make difficult the examination process for the Examiner, but was instead to be forthright and open in disclosing all information deemed to be relevant to the application in issue by third parties.

2. Citations of Foreign Language References

Applicants have re-examined the foreign references listed in all of the Information Disclosure Statements and have either eliminated such references from the list, included translations herewith or provided statements as to the relevancy of such references (APPENDIX A). The inclusion of translations with this response is in compliance with 37 C.F.R. § 1.97 (f)

which states in part, "[I]f a bona fide attempt is made to comply with 37 C.F.R. § 1.98, but part of the required content is inadvertently omitted, additional time may be given to enable full compliance." The omission of any translations and/or relevancy statements for foreign references were inadvertent and unintentional and are herein submitted in accordance with 37 C.F.R. § 1.97 (f).

3. References in the Information Disclosure Statements Subsequent to Applicants' Latest Effective Filing Date of 9/11/87

Examiner stated "[n]umerous references listed in the IDS are subsequent to the applicant's latest effective filing date of 9/11/87, therefore, the relevancy of those references is unclear." Upon further examination, the Applicants have eliminated those patents and publications after the effective filing date for the present application. It is the Applicants' understanding that the effective filing date for the present application is 11/3/81.

4. Citation of Unrelated References

Applicants appreciate the Examiner pointing out such references that were listed yet on their face appear to be unrelated to the subject matter of the present application. In response to such information, the Applicants have reviewed the cited references and removed any such references which appear to be unrelated on their face to the claimed subject matter such as the patent for a beehive, the patent for a chemical compound and numerous computer printout search results.

5. Citation of Database Search Results

Database search results listed in foreign languages where no copy was provided have been eliminated from the substitute Information Disclosure Statement included with this office action.

The Applicants offer the corrected Information Disclosure Statement (APPENDIX B) as a substitute to the previously filed Information Disclosure Statement filed 4/7/97. No new entries have been entered, only citations which have, upon further examination, been determined not to

be relevant to the claimed subject matter have been eliminated, typographical errors have been corrected, dates inserted where possible and the list shortened as a result. It is the Applicants' intention that such corrected Information Disclosure Statement will help clarify any issues previously raised by the Examiner and aid in the prosecution of the present patent application.

D. Response to Rejections under 35 U.S.C. § 112

1. Specification Support of the Claims

Paragraph 8 of the Office Action rejects claims 2-43 under 35 U.S.C. § 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention. The Office Action specified essentially all of the language of claims 2-43 as not being supported by the specification as originally filed.

The following tables list Applicants' claim language in the left column which corresponds to the specification support in the right column.

a. Claim 2

A method of gathering information on the use of a control signal at a receiver station,	Col. 15 lines 28-30 with col. 7 lines 50-60 and col. 17 lines 13-19.
said receiver station having a plurality of inputs, a processor,	For example, Figs. 3A, 3B, & 3C or Figs. 6F & 6G
and a least one controllable device, said receiver station transferring said gathered information to	For example, #73 or #205
a remote station, said method comprising the steps of:	Col. 11 lines 8-10, col. 17 lines 16-17 or col. 20 lines 55-57
identifying a control signal;	Col. 11 lines 39-40, including "received earlier," with col. 11 lines 21-24, including "identified" Col. 11 lines 38-39, including "identification signals on the incoming programming" with respect to col. 11 lines 41-43

	and, for example, col. 11 lines 50-57.
searching for said control signal [identified in said step of identifying said control signal] in an input data stream based on said step of identifying;	For example, col. 15 lines 50-51. For example, col. 11 lines 3-5 with col. 9 lines 47-57.
passing said control signal [from said step of searching for said identified control signal] from said processor to said at least one controllable device based on said step of searching; and	Col. 11 lines 6-14 and col. 7 lines 50-60
Communicating information on the passing of said [identified] control signal from said receiver station to said remote station.	Col. 8 lines 6-12 and 44-50

b. Claim 5

external device is a storage device	Col. 11 line 65

c. Claim 6

external device is a [heater] switch	Col. 11 lines 54-55

d. Claim 7

external device is a[n air conditioner] building facilities operating device	Col. 17 lines 55-56 with col. 18 lines 6-7

e. Claim 8

external device is a tuner [radio receiver]	Col. 18 lines 64-65

f. Claim 9

external device is a computer	Col. 11 line 14

g. Claim 10

external device is a [video] recorder	Col. 11 line 65

h. Claim 11

external device is a printer	Col. 11 line 65

i. Claim 12

external device is a [laser] disk	Col. 12 lines 3-7

j. Claim 13

a plurality of input ports for receiving multimedia signals;	Figs. 6B and 6F-6G with respect to "multimedia" at col. 18 line 18, col. 15 lines 28-30, col. 7 lines 50-60 and col. 17 lines 13-17.
an output port;	#258 in Fig. 6F
a processor operatively connected to said plurality of input ports and said output port;	#200 in figs. 6F & 6G
identifying a control signal from at least one of said plurality of input ports;	Col. 17 lines 39-41, including "instruction," with col. 9 lines 37-57.
passing said control signal from said identifying from said processor to said output port;	Col. 7 lines 50-60.
Communicating information of the passing of said identified control signal from said step of passing to a remote data collection station.	Col. 8 lines 6-12 and 44-50

k. Claim 14

storing said information on the passing of said identified control signal on a storage device before said step of communicating	Col. 8 line 7
delaying said step of communicating [for] based on a predetermined [time] condition	Col. 8 lines 16-19 with lines 46-50

l. Claim 16

Communication of information from said apparatus to said remote data collection station uses a telephone interface.	Col. 8 line 12

m. Claim 16

Communication of information from said apparatus to said remote data collection station uses a telephone interface.	Col. 8 line 12

n. Claim 18

generating a bill for the use of said control signal at said remote station based on the identification and passing of said control signal at said receiver station	Col. 20 lines 57-58, col. 20 lines 28-43

o. Claim 19

storing information on the passing of said identified control signal on a storage device at said receiver station before said step of communicating; and	Col. 8 line 7
delaying said step of communicating for a predetermined time	Col. 8 lines 16-19 with lines 46-50

p. Claim 20

output port is connected to an internal device.	Col. 7 lines 54-58

q. Claim 21

inputting an instruct signal which is effective at said subscriber station to control an apparatus and at least one of a code and a datum to serve as evidence of at least one of the passing of said instruct signal to a controllable apparatus and the functioning of said controllable apparatus in response to said instruct signal	Col. 20 line 17 with respect to col. 17 line 65 to col. 18 line 1 and col. 20 line 32. Col. 15 lines 58-60 and col. 20 lines 54-55
detecting the presence of at least one of an instruction, said code and said datum, which is effective at the subscriber station to at least one of	Col. 20 lines 28-30 with respect to col. 18 lines 14-16 Col. 17 lines 33-35

processing at the subscriber station at least one locally inputted datum and performing, in response to said detected one of said instruction, said code and said datum, at least one of: [(a) generating at least one subscriber station specific datum and] communicating said generated at least one subscriber station specific data to a transmitter; and [(b) selecting and assembling into a record a plurality of subscriber specific data and] communicating said record and said selected specific plurality of subscriber specific data to a transmitter; and	Col. 20 lines 24-28 Col. 20 lines 24-25 Col. 20 lines 43-47 with col. 16 line 57 Col. 20 lines 43-47 with col. 9 line 68 to col. 10 line 2
transmitting at least one of said communicated at least one generated subscriber station specific] datum and said communicated record and plurality of subscriber specific data to said at least one remote collection station[s].	Col. 20 lines 55-57

q. Claim 22

storing a subscriber instruction to receive at least one of specific mass medium program, data, news items, and computer control ; instructions; and	Col. 20 line 27
receiving at least one of specific mass medium programs, data, news items, and computer control instructions in accordance with said instruction	Col. 20 line 48

r. Claim 23

storing a subscriber instruction to at least one of process and present at least one of mass medium programs, data, news items, and computer control instructions in a specific fashion; and at least one of	Col. 20 line 27
processing and presenting at least one Q specific mass medium programs, data, news items, and computer control instructions in accordance with said instruction	Col. 20 line 50

s. Claim 24

programming a processor to respond to an instruct signal communicated from a data or programming source;	Col. 18 lines 56-59
receiving an information transmission from at least one of a data and programming source;	Col. 18 lines 59-60 with col. 9 lines 47-50
inputting at least some of said information transmission to a control signal detector;	Col. 9 lines 53-55
detecting said instruct signal in said information transmission; and	Col. 9 lines 55-57 with col. 18 lines 60-61
passing said instruct signal to said processor.	Col. 18 lines 61-63

t. Claim 25

receiving [on] at said receiver identification signals that identify specific signal content for at least one of a plurality of one of concurrent broadcast and cablecast signal transmissions;	Col. 18 lines 39-41 and 44-46 and for example, col. 18 lines 53-56.
providing a comparison signal to said processor;	Col. 18 lines 56-58
comparing said comparison signal to said identification signals and generating a control signal identifying a desired one of said plurality of one of broadcast and cablecast signal	Col. 18 lines 59-65 Col. 18 lines 64-65 or col. 19 lines 23-25

transmission based on said step of comparing;	
tuning said receiver, based on said generated control signal, to receive said desired one of said plurality of one of broadcast and cablecast signal transmissions;	Col. 19 lines 27-29
inputting at least [some] a portion of said desired signal transmission to said processor; and	Col. 20 lines 28-31
responding to (i) an instruct signal detected in said desired signal transmission which is effective to control a receiver station apparatus and (ii) a code or datum to serve as evidence of the passing of said instruct signal to a controllable apparatus or of the functioning of said controllable apparatus in response to said instruct signal.	Col. 20 lines 32-35 and col. 2 line 32 Col. 15 lines 58-60, col. 20 lines 50-55

u. Claim 26

receiving said at least one instruct signal and at least one of a code and a datum at said at least one origination transmitter station and delivering said at least one instruct signal and said at least one of said code and said datum to at least one origination transmitter, said at least one instruct signal being operative at said at least one receiver station to control at least one controllable apparatus, said at least one of said code and said datum being operative at said at least one receiver station to serve as evidence of at least one of passing of said at least one instruct signal to said at least one controllable apparatus [or of the]	Col. 19 lines 60-63 with for example col. 20 lines 32-35 Col. 15 lines 58-60 and col. 20 lines 50-55 Col. 20 lines 57-59 Col. 20 lines 28-47

and functioning of said at least one controllable apparatus in response to said at least one instruct signal;	
receiving said at least one control signal which at said remote intermediate data transmitter station operates to control the communication of said at least one instruct signal and said at least one of said code and said datum: and	Col. 19 lines 60-63 with col. 11 lines 38-43
transmitting said at least one control signal to said at least one origination transmitter before a specific time.	Col. 19 lines 60-63

v. Claim 27

comprising the step of embedding a specific one of said at least one control signal one of in said instruct signal and in an information transmission containing said instruct signal before transmitting said instruct signal to said remote transmitter station.	Col. 9 line 31 and col. 9 lines 32-33

w. Claim 28

wherein said specific time is a scheduled time of transmitting one of said instruct signal and some information associated with said instruct signal from said remote intermediate data transmitter station and said at least one control signal is effective at said remote intermediate data transmitter station to control at least one of said plurality of selective transmission devices at different times	For example, col. 11 lines 38-43 For example, col. 11 lines 57-65 and col. 11 lines 41-46 with col. 10 lines 40-52

x. Claim 29

storing user data of interest	Col. 18 lines 47-48 and col. 19 lines 39-49
receiving from a television programming source an	Col. 19 lines 28-29

information transmission containing television programming	
transferring said television programming to said television monitor and displaying the television programming	Col. 19 lines 53-56
detecting in said information transmission at least one instruct signal which is operative to control a receiver station apparatus and at least one of a code and a datum to serve as evidence of at least one of (i) a passing of said at least one instruct signal to at least one controllable apparatus and (ii) the functioning of said at least one controllable apparatus in response to said at least one instruct signal;	Col. 19 line 63 with col. 18 lines 14-15 Col. 19 line 65 or col. 20 line 32 Col. 15 lines 52-60, col. 20 lines 54-59
controlling said computer based on said detected at least one instruct signal, said step of controlling comprising: (1) selecting at least a portion of said stored user data of interest; (2) communicating said selected at least said portion of said stored user data of interest to said television monitor; and subsequently (3) ceasing to communicate said select at least said portion to said television monitor; and	Col. 19 line 65 to col. 20 line 5 Col. 19 lines 65-66 Col. 19 line 67 to col. 20 line 1 Col. 20 lines 4-5
evidencing said at least one of said combined and said sequential output of said received television programming and said selected specific portion of said stored user data of interest by storing said at least one of said code and said datum in a record.	Col. 16 lines 3-13 and col. 16 line 51 to col. 17 line 9 with col. 19 line 67 to col. 20 line 5

y. Claim 30

programming said receiver station to process viewer data of interest and to respond to at least one instruct signal associated with a television program	Col. 18 lines 47-49 and col. 19 lines 42-44
receiving a command one of embedded in and associated with a signal that contains a television program	Col. 19 lines 63-67 with lines 52-53
storing a locally input command that one of designates and specifies one of: [(1)] a television program to be one of displayed and recorded; [(2)] a fashion in which to present one of a television program and some computer output; and [(3)] a time in which to display one of some television programming and computer output	Col. 17 lines 13-17 with col. 19 lines 63-67 and lines 52-53
controlling one of a processor and computer to process a viewer reaction to one of a unit of programming and an image displayed at said television monitor, said step of controlling comprising the steps of: [(1)] assembling a record that includes additional data besides said viewer reaction; and [(2)] transmitting said record to a remote data collection station;	Col. 20 lines 32-34 with lines 21-27 Col. 9 line 68 to col. 10 line 2 and col. 17 lines 8-9 with col. 20 lines 43-47 Col. 20 lines 55-57
controlling one of a processor and computer to process a viewer reaction to one of a unit of programming and an image displayed at said television monitor, said step of controlling comprising the steps of: [(1)] detecting a datum that identifies one of a unit of programming and an	Col. 20 lines 32-34 with lines 21-27 Col. 18 lines 14-15 with col. 20 lines 50-55

image displayed at said television monitor; and [(2)] transmitting said datum to a remote data collection station;	Col. 18 lines 31-36 Col. 18 lines 36-38 with col. 20 lines 55-57
controlling one of a processor and computer to process a viewer reaction to a one of unit of programming and an image displayed at said television monitor, said step of controlling comprising the steps of: [(1)] storing a datum that identifies one of a unit of programming and an image displayed at said television monitor; and [(2)] passing data of <u>one of (i)</u> the availability, [one of] <u>(ii)</u> use and <u>(iii)</u> usage of one of programming and [an image] <u>said data</u> to one of a processor and computer that controls one of the selection and communication of program materials [for display] at said receiver station; and	Col. 20 lines 32-34 with lines 21-27 Col. 18 line 37 with col. 20 lines 50-55 and col. 18 lines 31-36 Col. 18 lines 59-66 and col. 18 lines 31-37
controlling one of a processor and computer to process a viewer reaction to one of a unit of programming and an image displayed at said television monitor, said step of controlling comprising the steps of: [(1)] one of controlling a receiver to receive and a storage location to communicate a unit of programming associated with said unit of programming or image or in response to said viewer reaction; and [(2)] outputting said [communicated] unit of programming at an output device of said receiver station.	Col. 20 lines 32-34 with lines 21-27 Col. 19 lines 28-29 Col. 19 lines 64-67 Col. 19 line 67 to col. 20 line 2

z. Claim 31

receiving and storing a program that contains video information;	Col. 19 lines 22-27
receiving at least one instruction and at least one of code and a datum, said at least one instruction having effect at a user station to control at least one [receiver station] controllable apparatus, said at least one of said code and said datum having effect at said user station to serve as evidence of at least one of [a] passing of said at least one instruction to said at least one controllable apparatus and [of] at least one function performed by said at least one controllable apparatus in response to said at least one instruction ;	Col. 19 lines 22-25 with col. 19 lines 60-63 Col. 15 lines 57-60, col. 19 lines 14-15 and 20-23 Col. 18 lines 36-38 and col. 20 lines 55-59
encoding said at least one instruction, wherein said step of encoding translating said at least one instruction to at least one control signal, said at least one control signal for directing a processor at [a] said user station to control said at least one controllable apparatus;	Col. 19 lines 60-63 with col. 9 lines 31-33 Col. 19 lines 64-67
storing said at least one control signal from said step of encoding in conjunction with said program; and	Col. 19 lines 26-27 with col. 19 lines 43-44
storing said at least one of said code and said datum from said step of receiving in conjunction with said program and said at least one control signal.	Col. 19 lines 26-27 with col. 16 lines 25-32

aa. Claim 32

storing said supplemental program material in conjunction with said program and said control signal;	Col. 19 lines 26-27 with col. 19 lines 43-53

and	
storing a second control signal in conjunction with said program and said control signal from said step of encoding, said second control signal having effect at a user station to one of query a remote station and receive said supplemental program material in a broadcast or cablecast transmission	Col. 19 lines 26-27 with col. 8 lines 60-62 and col. 19 lines 38-41

bb. Claim 33

transmitting a combined video signal from said program and said video overlay generated by said processor over one of a broadcast and cablecast network to a plurality of receiver stations; and	Col. 3 lines 32-37 with col. 19 lines 57-59
transmitting a combined video signal from said program and said video overlay generated by said processor to a co-located video display	Col. 19 line 65 to col. 20 line 2

cc. Claim 34

receiving a second instruction, said second instruction being one of the group consisting of:	Col. 19 lines 22-25 with lines 43-44
(1) an instruction which is effective at a user station to generate some output to be associated with said program	Col. 19 lines 48-49
(2) an instruction which is effective at a user station to generate some output to be associated with [said] a product, service, or information presentation	Col. 19 lines 48-49 and col. 20 lines 20-21
(3) an instruction which is effective at a user station to display one of a combined and sequential presentation of a mass medium program and a user specific datum	Col. 19 line 63 to col. 20 line 7
(4) an instruction which is	Col. 20 line 32 with col. 20 lines 20-27

effective at a user station to process a user reaction to said program	
(5) an instruction which is effective at a user station to communicate to a remote station one of a query in respect of information to be associated with said program and to enable display of said program	Col. 8 lines 60-62 with col. 19 lines 38-41
(6) an instruction which is effective at a user station to control a user station to receive information to supplement said program	Col. 20 lines 32-43
(7) an instruction which is effective at a user station to process a digital television signal [which is separately defined from standard analog television]; and	Col. 19 line 64 to col. 20 line 2
(8) an instruction which is effective at a user station to serve as a basis for one of (i) enabling an output device to display [one of] at least some of said program and [for] (ii) enabling a processor to process some executable code	Col. 13 lines 16-20 and col. 20 lines 32-43
encoding said second instruction, said second step of encoding translating said second instruction to a second control signal, said second control signal for directing said ancillary processor to perform said specified second effect indicated by said second instruction with said program; and	Col. 19 lines 60-63 with col. 9 lines 31-33
storing said second control signal from said second step of encoding in conjunction with said program.	Col. 19 lines 26-27

dd. Claim 35

embedding said control signal in the non-visible portion of a television signal;	Col. 4 lines 5-6 and lines 20-22
embedding a code in said program that enables one of a computer	Col. 13 lines 17-20 and lines 31-32 with col. 21 lines 25-43

and controller to control a presentation of said program in accordance with said control signal;	
communicating a program unit identification code and storing said program unit identification code at a storage location associated with said program; and	Col. 16 lines 25-32 with col. 15 lines 57-60
communicating to and storing at a storage location associated with said program some information to evidence one of an availability, use, and usage of said program at a user station.	Col. 16 lines 21-32 with col. 15 lines 57-60, col. 15 line 29 and col. 18 line 41

ee. Claim 36

receiving at at least one of a broadcast and a cablecast transmitter station	Col. 10 lines 61-63 with col. 4 lines 5-13
(i) at least one instruct signal which is effective at said plurality of receiver stations to control at least one controllable apparatus and	Col. 19 lines 14-15 with respect to lines 20-29
(ii) at least one of a code and a datum to serve as evidence of at least one of [a] passing of said at least one instruct signal to at least one controllable apparatus and [a] functioning of said at least one controllable apparatus in response to said at least one instruct signal;	Col. 15 lines 57-60, col. 16 lines 25-31, col. 18 lines 36-38 and col. 20 lines 55-59
transferring said at least one instruct signal and said at least one of said code and said datum to at least one transmitter;	Col. 11 lines 54-57
receiving at least one control signal at said transmitter station, said control signal designating at least one receiver station of said plurality of receiver stations in which said at least one instruct signal is addressed; and	Col. 10 lines 61-63 with col. 4 lines 5-13 and col. 17 lines 39-44, including, "as directed" at line 44

transmitting [transferring] said at least one control signal[s] from said at least one transmitter, said at least one transmitter at least one of broadcasting and cablecasting said at least one instruct signal, said at least one of said code and said datum, and said at least one control signal to said plurality of receiver stations.	Col. 11 lines 52-57 and col.19 lines 14-15

ff. Claim 37

wherein one of said instruct signal and said control signal is embedded in one of the non-visible portion of a television signal and a multichannel broadcast or cablecast signal that contains video	Col. 4 lines 5-6 and lines 20-22

gg. Claim 38

wherein said at least one control signal identifies two of said plurality of receiver stations asynchronously and each of said two receiver stations receive and respond to said instruct signal asynchronously	Col. 19 lines 60-67 with col. 4 lines 5-13 with col. 3 lines 48-51, col. 11 lines 57-65 with col. 11 lines 41-46, col. 10 lines 49-52, and col. 19 lines 14-15

hh. Claim 39

detecting a signal which is effective at the transmitter station to instruct communication;	Col. 11 lines 3-14 with col. 9 lines 47-57, col. 11 lines 38-45 and 50-57
determining a specific signal source from which to communicate a signal to a transmitter;	Col. 11 lines 50-52
controlling said switch to communicate a signal to said transmitter in response to a signal which is effective at the transmitter station to instruct communication;	Col. 11 lines 50-57 and col. 11 lines 38-43
controlling said switch to communicate a signal from a	Col. 11 lines 54-57

selected signal source; and	
controlling said switch to communicate to one of said memory and recorder a signal which is effective at the receiver station to instruct.	Col. 11 lines 57-64 with col. 4 lines 5-13 and col. 11 lines 38-39

ii. Claim 40

detecting a signal which is effective at the transmitter station to instruct transmission	Col. 11 lines 3-14 with col. 9 lines 47-57, col. 11 lines 38-45 and 50-57
inputting to said controller a signal which is effective to control said switch;	Col. 11 lines 12-14 with lines 38-43 and 50-57
Controlling said switch to communicate one or more signals according to a transmission schedule;	Col. 11 lines 38-43 and 50-57
controlling said switch to communicate from a specific one of a plurality of signal sources; and	Col. 11 lines 54-57
controlling said switch to communicate a signal to a selected one of a plurality of transmitters	Col. 11 lines 54-57 with col. 10 lines 43-47

jj. Claim 41

transmitting to a receiver station at least one data that one of designates one of a time and a channel of transmission of said instruct signal and that one of specifies the title of and some subject matter contained in one of a unit of mass medium programming and data associated with said instruct signal; and	Col. 19 lines 14-15 with col. 20 line 23
transmitting to a receiver station a control signal to cause said receiver station to tune to a broadcast or cablecast transmission containing a specific instruct signal.	Col. 20 lines 28-31 and col. 20 line 32

kk. Claim 42

wherein said at least one control	Co. 19 lines 45-53

signal further comprises downloadable executable code targeted to said processor at at least one of said plurality of receiver stations, said downloadable executable code programming one of the way and method in which said at least one processor responds to said instruct signal	Col. 19 lines 63-67

ll. Claim 43

wherein at least one receiver station is adapted to detect the presence of one of said control signal and programmed to respond to said instruct signal on the basis of the location of a signal in an information transmission, said method further comprising the step of causing at least some of said control signal or instruct signal to be transmitted in said location.	Col. 19 lines 60-63 with col. 4 lines 5-13 and col. 19 lines 42-44

2. Rejections Under 35 U.S.C. §112, Second Paragraph

Claims 2-24 and 26-30 are rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the Applicants regard as the invention.

Applicants believe that the claimed amendments and the above provided specification support is adequate to overcome the 112, second paragraph rejections.

3. Conclusion

Applicants respectfully submit that the claims of the subject application particularly point out and claim the subject matter sufficiently for one of ordinary skill in the art to comprehend the bounds of the claimed invention. The test for definiteness of a claim is whether one skilled in the art would understand the bounds of the patent claim when read in light of the specification, and if

the claims so read reasonably apprise those skilled in the art of the scope of the invention, no more is required. *Credle v. Bond*, 25 F.3d 1556, 30 USPQ2d 1911 (Fed. Cir. 1994). The legal standard for definiteness is whether a claim reasonably apprises those of skill in the art of its scope. *In re Warmerdam*, 33 F.3d 1354, 31 USPQ2d 1754 (Fed. Cir. 1994). Applicants have amended the claims to enhance clarity and respectfully submit that all pending claims are fully enabled by the specification and distinctly indicate the metes and bounds of the claimed subject matter.

Applicants believe that the above recited changes are sufficient to overcome the rejections under 35 U.S.C. 112, first and second paragraph, and respectfully request withdrawal of these rejections. Applicants provide these specific embodiments in support of the pending claims by way of example only. The claims must be read as broadly as is reasonable in light of the specification, and Applicants in no way intend that their submission of excerpts/examples be construed to unnecessarily restrict the scope of the claimed subject matter.

E. Response to Rejection of Claims for Absence of Novelty

Applicants further respectfully submit that claims in the present application should be allowed because these methods are not disclosed, taught, suggested, or implied by the applied prior art. For a prior art reference to anticipate in terms of 35 U.S.C. § 102, every element of the claimed invention must be identically shown in a single reference. *In re Bond*, 910 F.2d 831, 15 USPQ2d 1566 (Fed. Cir. 1990). There must be no difference between the claimed invention and the reference disclosure, as viewed by a person of ordinary skill in the field of the invention. *Scripps Clinic & Research Foundation v. Genetech, Inc.*, 927 F.2d 1565, 18 USPQ2d 1001, 18 USPQ2d 1896 (Fed. Cir. 1991). Absence from a cited reference of any element of a claim negates anticipation of that claim by the reference. *Kloster Speedsteel AB v Crucible, Inc.*, 230 USPQ 81 (Fed. Cir. 1986), *on rehearing*, 231 USPQ 160 (Fed. Cir. 1986).

1. 35 U.S.C. § 102 (b) Rejection over Osborn '491

Claims 2-4, 6-7, 13, 17-18, and 20 stand rejected under 35 U.S.C. § 102 (b) as being anticipated by Osborn '491.

a. Claim 2

With respect to claim 2, Osborn '491 fails to teach, *inter alia,* identifying a control signal and searching for said control signal in an input data stream based on said step of identifying. Instead, Osborn '491 teaches at the remote subscriber unit, interrogation signals that produce control signals that are later detected by detectors 48, 49, and 50. There is no suggestion of identifying and searching for controls signals in an input data stream.

Further, Osborn '491 is silent as to passing said control signal from said processor to said at least one controllable device based on the step of searching and communicating information on the passing of control signal from said receiver station to said remote station. Since Osborn '491 fails to suggest a control signal that is searched for and then identified in a data stream, Osborn '491 is also silent as to Applicants' passing step. Further, the produced control signals of Osborn '491 are supplied to various circuits, but are simply used to generate a master reset pulse. There is no suggestion that the control signal is both passed to a controllable device and passed from the receiver station to a remote station, wherein information is communicated on the passing. Osborn '491 fails to anticipate Applicants claimed invention.

b. Claim 13

With respect to claim 13, Osborn '491 fails to teach, *inter alia* identifying a control signal from at least one of said plurality of input ports and passing said control signal from said processor to said output port based on said step of identifying. As stated above, Osborn '491 teaches at the remote subscriber unit, interrogation signals that produce control signals that are later detected by detectors 48, 49, and 50. There is no suggestion of identifying and searching for

controls signals in an input data stream. Further, the produced control signals of Osborn '491 are supplied to various circuits, but are simply used to generate a master reset pulse. There is no suggestion that the control signal is passed to an output port, wherein communicating information of the passing of said identified control signal based on said step of passing. Osborn '491 fails to anticipate Applicants claimed invention.

c. Claims 3, 4, 6, 7, 17, 18, and 20

Claims 3, 4, 6, 7, 17, 18, and 20 depend upon independent claims 2 and 13. As discussed *supra,* Osborn '491 fails to disclose every element of claims 2 and 13 and thus, *ipso facto,* Osborn '491 fails to anticipate dependent claims 3, 4, 6, 7, 17, 18, and 20, and therefore, this rejection should be withdrawn and the claim be permitted to issue.

Applicants respectfully submit that the cited art does not anticipate claims 2-4, 6, 7, 13, 17, 18, and 20 since the reference fails to disclose every element of the claimed invention, and Applicants respectfully request that the 35 U.S.C. § 102 (b) rejection of claims 2-4, 6, 7, 13, 17, 18, and 20 be withdrawn.

2. 35 U.S.C. § 102 (b) Rejection over Block '884

Claims 21-24 stand rejected under 35 U.S.C. § 102 (b) as being anticipated by Block '884.

With respect to claim 21, Block '884 fails to teach, *inter alia,* Inputting an instruct signal which is effective at said subscriber station to control an apparatus. The office action equates Block's program ID code (TPC) to Applicants' claimed instruct signal. Applicants respectfully disagree and submit that Block '884 fails to teach any signal that functions as Applicants claimed instruct signal. For example, the TPC code of Block '884 is simply detected by the control and storage unit in the incoming program signal and stored. There is no suggestion that the TPC

code is effective to control an apparatus. In fact, the TPC code is simply detected and stored in order for billing computer 20 to access the TPC codes so that the subscriber may be billed.

Further, Block '884 fails to suggest or describe at least one of code and datum to serve as evidence of at least one of the passing of said instruct signal to a controllable apparatus and the functioning of said controllable apparatus in response to said instruct signal. The office action states, "that when the subscriber station receives the TPC code from central station 10, this is evidence as to the passing of the instruct signal to the controllable apparatus (which is the receiver 22). Applicants respectfully disagree and submit that the TPC code is received at the subscriber station via receiver 22, however the TPC code is not responsible for controlling the functioning of the receiver station. Instead, the TPC code is simply detected and stored in order for billing computer 20 to access the TPC codes so that the subscriber may be billed. In addition to the fact that the TPC code does not function as Applicants claim, there is no code or datum in Block '884 to serve evidence of at least one of the passing of said instruct signal to a controllable apparatus.

Further, Block '884 is silent as to detecting the presence of at least one instruction, said code and said datum, which is effective at said subscriber station to at least one of generate at least one subscriber station specific data and to select and assemble a plurality of specific subscriber specific data into a record. The office action states that Block '884 "shows detecting the presence of an instruction (command from the billing data gathering computer to send the SPC), which is effective at the subscriber station to generate one subscriber station specific data (which is the stored viewed program code, SPC)." Applicants disagree and submit that the code which computer 20 sends to access unit 32 to receive the TPC code does not generate or select and assemble subscriber data. The code is simply used to access code that has already been stored and represents the actual programs viewed during the preceding month. There is no

suggestion in Block '884 of detecting the presence of at least one instruction, said code and said datum, which is effective at said subscriber station to at least one of generate at least one subscriber station specific data and to select and assemble a plurality of specific subscriber specific data into a record.

Further, since Block '884 fails to teach or describe Applicants' claimed instruction and its function, clearly there is no suggestion of at least one of communicating said generated at least one subscriber station specific data to a transmitter and communicating said record and said selected specific plurality of subscriber specific data to a transmitter as well as transmitting such to a remote collection site, as claimed by Applicants. Block '884 fails to anticipate Applicants' claimed invention.

Claims 22-24 depend upon independent claim 21. As discussed *supra,* Block '884 fails to disclose every element of claim 21 and thus, *ipso facto*, Block '884 fails to anticipate dependent claims 2-24, and therefore, this rejection should be withdrawn and the claim be permitted to issue.

Applicants respectfully submit that the cited art does not anticipate claims 21-24 since the reference fails to disclose every element of the claimed invention, and Applicants respectfully request that the 35 U.S.C. § 102 (b) rejection of claims 21-24 be withdrawn.

3. 35 U.S.C. § 102 (b) Rejection over Campbell '791

Claims 25-27, 36, 37, and 40-43 are rejected under 35 U.S.C. § 102 (b) as being anticipated by Campbell '791.

Applicants maintain that the rejection based upon Campbell is improper under either 35 U.S.C. § 102(b) or 35 U.S.C. § 102(e). The claims stand rejected under 35 U.S.C. § 102 (b or e) depending on the effective filing date. As noted above, all of the claims as herein presented are supported by Application Serial No. 317,510, filed November 3, 1981, and on which the instant

application claims priority. The effective filling date for every pending claim is, thus, November 3, 1981. As Campbell issued after this effective filing date, Campbell is not available as a reference under 35 U.S.C. § 102(b).

Applicants further submit that a proper rejection under 35 U.S.C. § 102(e) has not been established in the Final Office Action. Under 35 U.S.C. § 102(e) an issued patent that was filed in the United States prior to the invention by Applicants of the claimed subject matter may be relied upon to show anticipation. Campbell issued from U.S. Application Serial No. 617,137 filed June 4, 1984, which is subsequent to the effective filing date of Applicants' claims. However, Campbell claims priority as a continuation of Ser. No. 348,937 filed November 27, 1981, which is a continuation-in-part (CIP) of Ser. No. 135,987 filed March 31, 1980. The earliest filing date of March 31, 1980 is apparently relied upon in the Final Office Action. However, "In order to carry back the 35 U.S.C. § 102(e) critical date of the U.S. patent reference to the filing date of a parent application, the parent application must . . . support the invention as required by 35 U.S.C. § 112, first paragraph." MPEP § 2136.03 (citing *In re Wertheim*, 646 F.2d 527, 209 USPQ 554 (CCPA 1981)). There is no showing in the Final Office Action that the application filed March 31, 1980, supports the claims in Campbell. A proper rejection under 35 U.S.C. § 102(e) has not, therefore, been established in the Final Office Action.

Also, it has not been demonstrated in the Final Office Action that the disclosure of the parent application filed March 31, 1980, includes the subject matter that is applied against the present application to negate patentability under 35 U.S.C. § 102(e). "[W]hen the reference is a continuation-in-part of an earlier filed application . . . and it is necessary to go back to the earlier filing date, the fact that the subject matter relied upon was originally disclosed on that date in the first application should be stated." MPEP § 707.05(e). Applicants submit that since the chain of applications relied upon includes a continuation-in-part application, the disclosure of the issued patent may not be applied under 35 U.S.C. § 102(e) without demonstrating that the subject matter relied upon was disclosed in the application that was filed prior to the effective filing date of Applicants' claims. In the Final Office Action, it is asserted that all the features relied by the

examiner to support the rejection were supported by the Campbells' parent application. There is no support provided for this assertion. The rejection in the Final Office Action under 35 U.S.C. § 102(e) includes no demonstration that the subject matter relied upon was disclosed in the application filed March 31, 1980. Accordingly, a proper rejection under 35 U.S.C. § 102(e) has not been established.

In the Final Office Action, it was also noted that the Campbell has a PCT equivalent application that was published in October of 1981. The PCT publication has not been cited against Applicants' claims. Notwithstanding, the PCT publication is not prior art under 35 U.S.C. § 102(b) because it was not available more than one year prior to the effective filing date of Applicants' claims. The PCT application is also not prior art under 35 U.S.C. § 102(e) because it is not an application for patent filed in the United States.

Notwithstanding the availability of Campbell as prior art, Campbell fails to anticipate Applicants' claims as asserted in the Final Office Action. The following arguments demonstrate that Applicants' claims are patentably distinguishable from the invention disclosed in Campbell.

a. Claim 25

With respect to claim 25, Campbell '791 fails to teach, *inter alia,* receiving at said receiver, identification signals that identify specific signal content for at least one of a plurality of one of concurrent broadcast and cablecast signal transmissions. The office action equates Applicants' claimed identification signals with Campbell's subscriber identification code. Applicants submit that the subscriber ID code is only "unique to the specific remote subscriber station." Campbell '791, col. 13 lines 37-38. There is no teaching that the subscriber ID code identifies specific signal content for at least one of a plurality of one of concurrent broadcast and cablecast signal transmissions, as taught by Applicants. Instead, the subscriber ID code identifies the subscriber station, not the signal content.

Further, Campbell '791 is silent as to providing a comparison signal to said processor and comparing said comparison signal to said identification signals and generating a control signal

identifying a desired one of said plurality of one of broadcast and cablecast signal transmissions. Campbell '791 does teach making several comparisons between the subscriber addressing data and the channel control words. However, there is no suggestion of generating a control signal identifying a desired one of said plurality of one of broadcast and cablecast signal transmissions, based on the comparisons, as claimed by Applicants. Instead, Campbell '791 makes the comparisons until a yes answers is received in order for the converter to proceed with a further decision step. Campbell '791 is silent as to comparing and then generating a control signal identifying a desired one of said plurality of one of broadcast and cablecast signal transmissions.

Further, Campbell '791 is silent as to tuning said receiver, based on said generated control signal, to receive said desired one of said plurality of one of broadcast and cablecast signal transmission. Clearly, Campbell '791 is silent as to any generated control signal based on any comparisons, therefore, Campbell '791 is silent as to Applicants' claimed tuning step. Further, Campbell '791 does teach inputting RF data loaded television signals to a conventional tuner, however there is no suggestion of tuning the tuner based on any generated control signal that is generated based on comparisons.

Further, Campbell '791 fails to suggest or describe inputting at least a portion of said desired signal transmission to said processor and responding to an instruct signal detected in said desired signal transmission which is effective to control a receiver station apparatus. The office action equates either the screen control data words, the television signal, or the control data words to Applicants' claimed instruct signal. Applicants respectfully disagree and submit that Campbell '791 fails to teach any signal that functions as Applicants' claimed instruct signal. For example, Campbell '791 teaches that the received RF data loaded television signal is processed in order to provide video and audio for a television set. There is no suggestion that the television signal controls a receiver station apparatus, e.g., the television set as indicated in the office

action. Further, the control which is processed by control logic 40 and input to the descrambler 116 to control its operation, still does not function as Applicants claim. The control data is not evidenced by a code or datum as claimed by Applicants, nor is the control data communicated by a control signal.

Further, Campbell '791 is also silent as to a code or datum to serve as evidence of the passing of said instruct signal to a controllable apparatus or of the functioning of said controllable apparatus in response to said instruct signal. As stated, above Campbell '791 is silent as to the control data (indicated as being Applicants claimed instruct signal) being evidence by a code or datum. Campbell '791 is completely silent as to any code or datum that is effective to serve as evidence of the passing of said instruct signal to a controllable apparatus or of the functioning of said controllable apparatus in response to said instruct signal. However, the office action equates Applicants claimed code or datum to either the input page display or the vertical sync, of Campbell '791. Applicants disagree and submit that Campbell '791 teaches an alternative embodiment for the display of teletext data including an index page or pages that are automatically displayed to the user. There is no suggestion that the teletext system is capable of functioning as Applicants claim. Further, the sync pulses of Campbell '791 are simply used to time the transmission of data pages out of a memory. Again, there is no teaching that the synch pulses function as Applicants claim. Therefore, Applicants conclude that Campbell '791 fails to teach Applicants claimed code or datum as well as the instruct signal.

b. Claim 26

With respect to claim 26, Campbell '791 fails to teach, *inter alia,* Said at least one instruct signal being operative at said at least one receiver station to control at least one controllable apparatus. The office action equates either the screen control data words, the television signal, or the control data words to Applicants' claimed instruct signal. Applicants respectfully disagree and submit that Campbell '791 fails to teach any signal that functions as Applicants' claimed

instruct signal. For example, Campbell '791 teaches that the received RF data loaded television signal is processed in order to provide video and audio for a television set. There is no suggestion that the television signal controls a receiver station apparatus, e.g., the television set as indicated in the office action. Further, the control data words are composed of subscriber addressing data and channel control data which are used as a means of determining whether a subscriber is authorized to receive the television program and to enable the processing of the television signal. The control data is not evidenced by a code or datum as claimed by Applicants, nor is the control data communicated by a control signal.

Further, Campbell '791 is also silent as to said at least one of a code and a datum being operative at said at least one receiver station to serve as evidence of at least one of passing of said instruct signal to said at least one controllable apparatus and functioning of said at least one controllable apparatus in response to said at least one instruct signal. As stated, above Campbell '791 is silent as to the control data (indicated as being Applicants claimed instruct signal) being evidence by a code or datum. Campbell '791 is completely silent as to any code or datum that is effective to serve as evidence of at least one of passing of said instruct signal to said at least one controllable apparatus and functioning of said at least one controllable apparatus in response to said at least one instruct signal. However, the office action equates Applicants claimed code or datum to either the input page display or the vertical sync, of Campbell '791. Applicants disagree and submit that Campbell '791 teaches an alternative embodiment for the display of teletext data including an index page or pages that are automatically displayed to the user. There is no suggestion that the teletext system is capable of functioning as Applicants claim. Further, the sync pulses of Campbell '791 are simply used to time the transmission of data pages out of a memory. Again, there is no teaching that the synch pulses function as Applicants claim.

Therefore, Applicants conclude that Campbell '791 fails to teach Applicants claimed code or datum as well as the instruct signal.

Since Campbell '791 fails to teach Applicants claimed instruct signal, code or datum, clearly Campbell '791 is silent as to any control signal that communicates the instruct signal, code or datum. For example, Applicants claim receiving said at least one control signal which as the remote intermediate data transmitter station operates to control communication of said at least one instruct signal and said at least one of said code and said datum. The office action again equates the control data words, but this time to Applicants claimed control signal. Applicants disagree and submit that Campbell '791 is silent as to any control signal that communicates an instruct signal and code o datum that functions as Applicants claim. In fact, the control data words are composed of subscriber addressing data and channel control data which are used as a means of determining whether a subscriber is authorized to receive the television program and to enable the processing of the television signal. There is no suggestion that the control data is capable of controlling communication of said at least one instruct signal and said at least one of said code and said datum.

Further, since Campbell '791 is silent as to Applicants claimed instruct signal, code or datum, and the control signal, then Campbell '791 is silent as to transmitting the control signal to said at least one origination transmitter before a specific time. There is no suggestion in Campbell '791 whatsoever of transmitting any signal before a specific time.

c. Claim 36

With respect to claim 36, Campbell '791 fails to teach, *inter alia,* at least one instruct signal which is effective at said plurality of receiver stations to control at least one controllable apparatus. The office action equates either the screen control data words, the television signal, or the control data words to Applicants' claimed instruct signal. Applicants respectfully disagree

and submit that Campbell '791 fails to teach any signal that functions as Applicants' claimed instruct signal. For example, Campbell '791 teaches that the received RF data loaded television signal is processed in order to provide video and audio for a television set. There is no suggestion that the television signal controls a receiver station apparatus, e.g., the television set as indicated in the office action. Further, the control data words are composed of subscriber addressing data and channel control data which are used as a means of determining whether a subscriber is authorized to receive the television program and to enable the processing of the television signal. The control data is not evidenced by a code or datum as claimed by Applicants, nor is the control data communicated by a control signal.

Further, Campbell '791 is also silent as to at least one of a code and a datum to serve as evidence of at least one of passing of said at least one instruct signal to at least one controllable apparatus and functioning of said at least one controllable apparatus in response to said at least one instruct signal. As stated, above Campbell '791 is silent as to the control data (indicated as being Applicants claimed instruct signal) being evidence by a code or datum. Campbell '791 is completely silent as to any code or datum that is effective to serve as evidence of at least one of passing of said at least one instruct signal to at least one controllable apparatus and functioning of said at least one controllable apparatus in response to said at least one instruct signal. However, the office action equates Applicants claimed code or datum to either the input page display or the vertical sync, of Campbell '791. Applicants disagree and submit that Campbell '791 teaches an alternative embodiment for the display of teletext data including an index page or pages that are automatically displayed to the user. There is no suggestion that the teletext system is capable of functioning as Applicants claim. Further, the sync pulses of Campbell '791 are simply used to time the transmission of data pages out of a memory. Again, there is no teaching

that the synch pulses function as Applicants claim. Therefore, Applicants conclude that Campbell '791 fails to teach Applicants claimed code or datum as well as the instruct signal.

Since Campbell '791 fails to teach Applicants claimed instruct signal, code or datum, clearly Campbell '791 is silent as to any control signal that communicates the instruct signal, code or datum. For example, Applicants claim receiving said at least one control signal at said transmitter station, said at least one control signal designating at least one receiver station of said plurality of receiver station in which said at least one instruct signal is addressed. The office action again equates the control data words, but this time to Applicants claimed control signal. Applicants disagree and submit that Campbell '791 is silent as to any control signal that communicates an instruct signal and code o datum that functions as Applicants claim. In fact, the control data words are composed of subscriber addressing data and channel control data which are used as a means of determining whether a subscriber is authorized to receive the television program and to enable the processing of the television signal. There is no suggestion that the control data is capable of designating at least one receiver station of said plurality of receiver station in which said at least one instruct signal is addressed.

Further, since Campbell '791 is silent as to the instruct signal, code or datum, and the control signal and the functions of each, Campbell '791 is silent as to all of the following: transferring said at least one instruct signal and said at least one of said code and said datum to at least one transmitter; and transferring said at least one control signal from said at least one transmitter, said at least one transmitter at least one of broadcasting and cablecasting said at least one instruct signal, said at least one of said code and said datum, and said at least one control signal to said plurality of receiver stations. Campbell '791 fails to anticipate Applicants' claimed invention.

d. Claims 27, 37, and 40-43

Claims 27, 37, and 40-43 depend upon independent claims 25, 26, and 36. As discussed *supra,* Campbell '791 fails to disclose every element of claims 25, 26, and 36 and thus, *ipso facto*, Campbell '791 fails to anticipate dependent claims 27, 37, and 40-43, and therefore, this rejection should be withdrawn and the claim be permitted to issue.

Applicants respectfully submit that the cited art does not anticipate claims 26, 27, 36, 37, and 40-43 since the reference fails to disclose every element of the claimed invention, and Applicants respectfully request that the 35 U.S.C. § 102 (b) rejection of claims 26, 27, 36, 37, and 40-43 be withdrawn.

F. Response to Obviousness Rejection of Claims

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art to modify the reference to combine the teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references combined) must teach or suggest all the claim recitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not based on Applicants' disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). MPEP 706.02(j).

1. 35 U.S.C. § 103 (a) Rejection over Osborn '491

Claims 5, 8-12, 14-16, and 19 are rejected under 35 U.S.C. § 103 (a) as being unpatentable over Osborn '491.

Claims 5, 8-12, 14-16, and 19 depend upon independent claims 2 and 13. As discussed *supra,* Osborn '491 fails to disclose every element of claims 2 and 13 and thus, *ipso facto*, Osborn '491 fails to anticipate dependent claims 5, 8-12, 14-16, and 19, and therefore, this rejection should be withdrawn and the claim be permitted to issue. If an independent claim is

nonobvious under 35 U.S.C. 103, then any claim depending therefrom is nonobvious. *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988).

Applicants respectfully request that the 35 U.S.C. §103(a) rejection of claims 5, 8-12, 14-16, and 19 be withdrawn.

2. 35 U.S.C. § 103 (a) Rejection over Campbell '791 in view of Lambert '522

Claim 28 is rejected under 35 U.S.C. § 103 (a) as being unpatentable over Campbell '791 in view of USP 4,381,522 to Lambert , hereinafter Lambert '522.

Claim 28 depends upon independent claim 26. As discussed *supra,* Campbell '791 in fails to disclose every element of claim 26 and thus, *ipso facto*, Campbell '791 in view of Lambert '522 fails to anticipate dependent claim 28, and therefore, this rejection should be withdrawn and the claim be permitted to issue. If an independent claim is nonobvious under 35 U.S.C. 103, then any claim depending therefrom is nonobvious. *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988).

Applicants respectfully request that the 35 U.S.C. §103(a) rejection of claim 28 be withdrawn.

3. 35 U.S.C. § 103 (a) Rejection over Campbell '791

Claims 31-35, 38, and 39 are rejected under 35 U.S.C. § 103 (a) as being unpatentable over Campbell '791.

With respect to claim 31, Campbell '791 fails to, *inter alia*, teach or suggest all the claim recitations, i.e., Said at least one instruction having effect at a user station to control at least one controllable apparatus. The office action equates either the screen control data words, the television signal, or the control data words to Applicants' claimed instruct signal. Applicants respectfully disagree and submit that Campbell '791 fails to teach any signal that functions as Applicants' claimed instruct signal. For example, Campbell '791 teaches that the received RF

data loaded television signal is processed in order to provide video and audio for a television set. There is no suggestion that the television signal controls a receiver station apparatus, e.g., the television set as indicated in the office action. Further, the control data words are composed of subscriber addressing data and channel control data which are used as a means of determining whether a subscriber is authorized to receive the television program and to enable the processing of the television signal. The control data is not evidenced by a code or datum as claimed by Applicants, nor is the control data communicated by a control signal.

Further, Campbell '791 is also silent as to said at least one of a code and a datum having effect at said user station to serve as evidence of at least one of passing of said at least one instruction to said at least one controllable apparatus and at least one function performed by said at least one controllable apparatus in response to said at least one instruction. As stated, above Campbell '791 is silent as to the control data (indicated as being Applicants claimed instruct signal) being evidence by a code or datum. Campbell '791 is completely silent as to any code or datum that is effective to serve as evidence of at least one of passing of said at least one instruction to said at least one controllable apparatus and at least one function performed by said at least one controllable apparatus in response to said at least one instruction. However, the office action equates Applicants claimed code or datum to either the input page display or the vertical sync, of Campbell '791. Applicants disagree and submit that Campbell '791 teaches an alternative embodiment for the display of teletext data including an index page or pages that are automatically displayed to the user. There is no suggestion that the teletext system is capable of functioning as Applicants claim. Further, the sync pulses of Campbell '791 are simply used to time the transmission of data pages out of a memory. Again, there is no teaching that the synch pulses function as Applicants claim. Therefore, Applicants conclude that Campbell '791 fails to teach Applicants claimed code or datum as well as the instruct signal.

Since Campbell '791 fails to teach Applicants claimed instruction and the code or datum, clearly Campbell '791 is silent as to encoding said at least one instruction, wherein said step of encoding translates said at least one instruction to at least one control signal. The office action again equates the control data words, but this time to Applicants claimed control signal. Applicants disagree and submit that Campbell '791 is silent as to any control signal that is translated by encoding an instruction into the control signal. The control data words are composed of subscriber addressing data and channel control data which are used as a means of determining whether a subscriber is authorized to receive the television program and to enable the processing of the television signal. In addition, the office action has simply equated the instruction and the control signal as the same control data words without showing any encoding step. There is no suggestion that the control data is encoded which translates said at least one instruction to at least one control signal, wherein said at least one control signal is effective to direct a processor at said user station to control said at least one controllable apparatus.

Since, Campbell '791 is silent as to Applicants' claimed instruction, code or datum, and the control signal, Campbell '791 is also silent as to storing said at least one control signal from said step of encoding in conjunction with said program. Applicants further contend that because Campbell '791 fails to show the above steps as discussed, the storing step is not obvious or inherent, as suggested by the office action. Campbell '791 fails to anticipate Applicants' claimed invention.

Claims 32-35, 38, and 39 depend upon independent claim 31. As discussed *supra,* Campbell '791 fails to disclose every element of claim 31 and thus, *ipso facto*, Campbell '791 fails to anticipate dependent claims 32-35, 38, and 39, and therefore, this rejection should be withdrawn and the claim be permitted to issue. If an independent claim is nonobvious under 35

U.S.C. 103, then any claim depending therefrom is nonobvious. *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988).

Applicants respectfully request that the 35 U.S.C. §103(a) rejection of claims 31-35, 38, and 39 be withdrawn.

4. No Prior Art Rejection

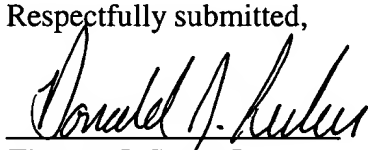
Claims 29 and 30 have not been rejected over the prior art of record. Applicants therefore, respectfully assume that the claims will be allowable upon withdrawal of the 112 rejections.

III. CONCLUSION

In accordance with the foregoing it is respectfully submitted that all outstanding objections and rejections have been overcome and/or rendered moot. Further, all pending claims are patentably distinguishable over the prior art of record, taken in any proper combination. Thus, there being no further outstanding objections or rejections, the application is submitted as being in a condition for allowance, which action is earnestly solicited.

If the Examiner has any remaining informalities to be addressed, it is believed that prosecution can be expedited by the Examiner contacting the undersigned attorney for a telephone interview to discuss resolution of such informalities.

Respectfully submitted,



Thomas J. Scøtt, Jr.
Reg. No. 27,836
Donald J. Lecher
Reg. No. 41,933
Attorney for Applicants
Tel: (202) 383-6790

Date: August 17, 1998

HOWREY & SIMON
1299 Pennsylvania Avenue, NW
Washington, D.C. 20004

APPENDIX A

The following foreign reference has been cited by Applicants in the Information disclosure Statements filed 4-7-97. Applicants have further included the following relevancy statement as well as an English abstract (in the case of foreign patents), thus meeting the requirements as set forth in 37 CFR 1.98 and MPEP § 609.

For the Information Disclosure Statement filed 4-7-97:

0 020 242 December 10, 1980 European

This reference discloses a teletext character alignment process.

24 53 441 May 13, 1976 Germany

This reference discloses a wideband signal transmission with digital to image signal conversion.

DE 3020787 December 17, 1981 Germany

This reference discloses a television transmission system that sends extra data during a blanking period.

WO 80/00292 February 21, 1980 Japan

This reference discloses a decoder for a television receiver that has a color component that splits signals and recombines the signals into a composite drive current signal.

Graf, P.H., "Antiope-Uebertragung fuer Breitbandige Videotex-Verteildienste," 1981.

This reference shows an Antiope demodulator/detector.

Heller, Arthur, "VPS - Ein Neues System Zuragsgesteurten Programmanfzeichnung, Rundfunk technisde Mitteilungen, pp. 162-169.

This reference discloses a decoding system for use with a VCR.

Marti, B et al., Discrete, service de television cryptee, Revue de radiodiffusion - television (1975), pp. 24-30.

This reference discloses an analog decryption system.

Strauch, D., "(Las Media De Telecommunication Devant la Rapture. Les Nonvellas Methodes Presentees a L'Eposition International 1979 de Radio (Et Television)) 1979.

This reference is a discussion of videotext, teletext, ceefax, oracle, and antiope.

APPENDIX B

INFORMATION DISCLOSURE STATEMENT BY APPLICANT CITATION FORM	Attorney Docket No. 05634.0065	Serial No. 08/452,395
	Applicant(s) John C. Harvey and James W. Cuddihy	
	Filing Date May 26, 1995	Group Art Unit 2745

UNITED STATES PATENT DOCUMENTS

EXAMINER INITIAL	PATENT NUMBER	PATENT DATE	NAME	CLASS/ SUBCLASS	FILING DATE*
	Re 27,810	November 20, 1973	Buehrle	325/321	
	2,418,127	April 1, 1947	Labin	178/44	
	2,563,448	August 7, 1951	Aram	178/5.1	
	3,071,649	January 1, 1963	Goodall	179/1.5	
	3,107,274	October 15, 1963	Roschke	178/5.1	
	3,133,986	May 19, 1964	Morris et al.	178/5.1	
	3,251,051	May 10, 1966	Harries	340/345	
	3,470,309	September 30, 1969	Nyberg	178/5.1	
	3,478,166	November 11, 1969	Reiter et al.	178/5.1	
	3,526,843	September 1, 1970	Sanville	329/104	
	3,546,684	December 8, 1970	Maxwell et al.	340/172.5	
	3,639,686	February 1, 1972	Walker et al.	178/5.8R	
	3,649,749	March 14, 1972	Gibson	178/5.6	
	3,651,261	March 21, 1972	Guanella	178/22	
	3,666,888	May 30, 1972	Sekimoto	178/69.5 TV	
	3,723,637	March 27, 1973	Fujio et al.	178/5.2R	
	3,746,799	July 17, 1973	Gentges	178/22	
	3,755,624	August 28, 1973	Sekimoto	178/69.5 TV	
	3,769,579	October 30, 1973	Harney	325/31	
	3,773,979	November 20, 1973	Kirk, Jr. et al.	179/15 FD	
	3,777,053	December 4, 1973	Wittig et al.	178/5.1	
	3,789,131	January 29, 1974	Harney	178/5.1	
	3,794,922	February 26, 1974	Osborn et al.	325/53	
	3,795,763	March 5, 1974	Golding et al.	178/5.6	
	3,813,482	May 28, 1974	Blonder	178/5.1	
	3,826,863	July 30, 1974	Johnson	178/5.1	
	3,859,596	January 7, 1975	Jannery et. al.	325/31	
	3,882,289	May 6, 1975	Walding et al.	200/11 D	
	3,885,089	May 20, 1975	Callais et al.	178/5.1	
	3,889,054	June 10, 1975	Nagel et al.	178/6.8	
	3,894,177	July 8, 1975	Howell et al.	178/5.6	
	3,896,262	July 22, 1975	Hudspeth et al.	178/5.1	

EXAMINER INITIAL	PATENT NUMBER	PATENT DATE	NAME	CLASS/ SUBCLASS	FILING DATE*
	3,896,266	July 22, 1975	Waterbury	179/1 SB	
	3,916,091	October 28, 1975	Kirk, Jr. et al.	178/5.1	
	3,924,059	December 2, 1975	Horowitz	178/5.1	
	3,950,618	April 13, 1976	Bloisi	179/2 AS	
	3,958,081	May 18, 1976	Ehrsam et al.	178/22	
	3,975,585	August 17, 1976	Kirk, Jr. et al.	178/5.1	
	3,990,012	November 2, 1976	Karnes	325/308	
	3,996,586	December 7, 1976	Dillon et al.	340/347 DD	
	4,004,085	January 18, 1977	Makino et al.	340/324	
	4,008,369	February 15, 1977	Theurer et al.	358/84	
	4,013,875	March 22, 1977	McGlynn	235/150.2	
	4,015,286	March 29, 1977	Russell	358/13	
	4,019,201	April 19, 1977	Hartung et al.	358/124	
	4,020,419	April 26, 1977	Caspari et al.	325/421	
	4,024,574	May 17, 1977	Nieson	358/117	
	4,024,575	May 17, 1977	Harney et al.	358/118	
	4,027,267	May 31, 1977	Larsen	329/106	
	4,027,331	May 31, 1977	Nicol	358/135	
	4,042,958	August 16, 1977	Saylor et al.	358/141	
	4,044,376	August 23, 1977	Porter	358/84	
	4,045,814	August 30, 1977	Hartung et al.	358/124	
	4,054,911	October 18, 1977	Fletcher et al.	358/141	
	4,064,490	December 20, 1977	Nagel	364/2000	
	4,070,693	January 24, 1978	Shutterly	358/123	
	4,075,660	February 21, 1978	Horowitz	358/124	
	4,079,419	March 14, 1978	Seigle et al.	358/193	
	4,081,754	Mach 28, 1978	Jackson	325/396	
	4,081,832	March 28, 1978	Sherman	358/124	
	4,086,434	April 25, 1978	Bocchi	79/2 AM	
	4,088,958	May 9, 1978	Suzuki et al.	325/396	
	4,091,417	May 23, 1978	Nieson	358/117	
	4,095,258	June 13, 1978	Sperber	358/120	
	4,096,542	June 20, 1978	Pappas et al.	361/196	
	4,104,681	August 1, 1978	Saylor et al.	358/141	
	4,107,734	August 15, 1978	Percy et al.	358/84	
	4,107,735	August 15, 1978	Frobach	358/84	
	4,112,317	September 5, 1978	Everswick	307/308	
	4,112,383	September 5, 1978	Burgert	329/50	
	4,114,841	September 19, 1978	Muhlfelder et al.	244/166	
	4,120,003	October 10, 1978	Mitchell et al.	358/142	
	4,124,887	November 7, 1978	Johnson et al.	364/107	
	4,126,762	November 21, 1978	Martin et al.	179/2A	
	4,135,213	January 16, 1979	Wintfeld et al.	358/142	

EXAMINER INITIAL	PATENT NUMBER	PATENT DATE	NAME	CLASS/ SUBCLASS	FILING DATE*
	4,142,156	February 27, 1979	Freund	325/309	
	4,145,717	March 20, 1979	Guif et al.	358/127	
	4,148,066	April 3, 1979	Saylor	358/127	
	4,156,253	May 22, 1979	Steudel	358/11	
	4,156,931	May 29, 1979	Adelman et al.	364/900	
	4,163,252	July 31, 1979	Mistry et al.	358/118	
	4,180,709	December 25, 1979	Cosgrove et al.	179/2 AM	
	4,199,656	April 22, 1980	Saylor	178/66.1	
	4,199,781	April 22, 1980	Doumit	358/83	
	4,199,809	April 22, 1980	Pasahow et al.	364/200	
	4,207,524	June 10, 1980	Purchase	375/22	
	4,214,273	July 22, 1980	Brown	358/188	
	4,215,366	November 13, 1984	Davidson	358/124	
	4,216,497	August 5, 1980	Ishman et al.	358/84	
	4,222,068	September 9, 1980	Thompson	358/120	
	4,225,884	September 30, 1980	Block et al.	358/122	
	4,245,246	January 13, 1981	Cheung	358/124	
	4,246,611	January 20, 1981	Davies	358/194	
	4,247,947	January 27, 1981	Miyamoto	455/38	
	4,250,521	February 10, 1981	Wright	358/8	
	4,258,386	March 24, 1981	Cheung	358/84	
	4,266,243	May 5, 1981	Shutterly	358/121	
	4,272,784	June 9, 1981	Saito et al.	358/127	
	4,273,962	June 16, 1981	Wolfe	179/7.1R	
	4,292,650	September 29, 1981	Hendrickson	358/123	
	4,295,155	October 13, 1981	Jarger et al.	358/12	
	4,301,542	November 17, 1981	Weintraub et al.	455/353	
	4,305,101	December 8, 1991	Yarbrough et al.	360/69	
	4,310,854	January 12, 1982	Baer et al.	358/143	
	4,316,217	February 16, 1982	Rifken	358/86	
	4,318,047	March 2, 1982	Dawson	328/112	
	4,323,921	April 6, 1982	Guillou	358/114	
	4,323,922	April 6, 1982	den Toonder et al.	358/117	
	4,329,711	May 11, 1982	Cheung	358/114	
	4,335,426	June 15, 1982	Maxwell et al.	364/200	
	4,340,906	July 20, 1982	den Toonder et al.	358/124	
	4,341,925	July 27, 1982	Doland	178/22.17	
	4,343,042	August 3, 1982	Schrock et al.	455/5	
	4,348,696	September 7, 1982	Beier	358/188	
	4,354,201	October 12, 1982	Sechet et al.	358/122	
	4,355,415	October 19, 1982	George et al.	455/185	
	4,358,672	November 9, 1982	Hyatt et al.	235/380	
	4,360,881	November 23, 1982	Martinson	364/493	

EXAMINER INITIAL	PATENT NUMBER	PATENT DATE	NAME	CLASS/ SUBCLASS	FILING DATE*
	4,361,848	November 30, 1982	Poignet et al.	358/1	
	4,361,851	November 30, 1982	Asip et al.	358/84	
	4,361,903	November 30, 1982	Ohta	455/2	
	4,365,267	December 21, 1982	Tsuda	358/84	
	4,378,470	March 29, 1983	Murto et al.	179/2 C	
	4,382,256	May 5, 1983	Nagata	340/825.44	
	4,385,384	May 24, 1983	Rosbury et al.	371/22	
	4,386,436	May 31, 1983	Kocher et al.	455/151	
	4,388,643	June 14, 1983	Aminetzah	358/123	
	4,388,644	June 14, 1983	Ishman et al.	358/84	
	4,390,898	June 28, 1983	Bond et al.	358/1199	
	4,390,901	June 28, 1983	Keiser et al.	358/147	
	4,392,135	July 5, 1983	Ohyagi	340/825.44	
	4,393,277	July 12, 1983	Besen et al.	179/2 A	
	4,408,345	October 4, 1983	Yashiro et al.	455/3	
	4,411,017	October 18, 1983	Talbot	455/26	
	4,414,621	November 8, 1983	Bown et al.	364/200	
	4,415,771	November 15, 1983	Martinez	179/5R	
	4,418,425	November 29, 1983	Fennel et al	455/27	
	4,424,533	January 3, 1984	Rzeszewski	358/167	
	4,425,578	January 10, 1984	Haselwood et al.	358/84	
	4,425,579	January 10, 1984	Merrell	358/86	
	4,427,968	January 24, 1984	York	340/310	
	4,430,731	February 7, 1984	Gimple et al.	370/30	
	4,434,438	February 28, 1984	Rzeszewski	358/167	
	4,450,481	May 22, 1984	Dickinson	358/114	
	4,450,531	May 22, 1984	Kenyon et al.	364/604	
	4,454,538	June 12, 1984	Toriumi	358/86	
	4,468,701	August 28, 1984	Burcher et al.	358/181	
	4,471,352	September 11, 1984	Soulliard et al.	340/825.44	
	4,475,123	October 2, 1984	Dumbauld et al.	358/114	
	4,476,535	October 9, 1984	Loshing et al.	364/480	
	4,484,218	November 20, 1984	Boland et al.	358/86	
	4,484,328	November 20, 1984	Schlafly	370/85	
	4,488,179	December 11, 1984	Kruger et al.	358/181	
	4,489,316	December 18, 1984	MacQuivey	340/700	
	4,504,831	March 12, 1985	Jahr et al.	340/870.03	
	4,646,145	February 24, 1987	Percy et al.	358/84	
	4,782,401	November 1, 1988	Faerber et al.	358/335	

* If Pertinent

FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	PUBLICATION DATE	COUNTRY	CLASS/ SUBCLASS	TRANSLATION YES	TRANSLATION NO
	0 020 242	December 10, 1980	European	G09G 1/16		X
	1,396,981	June 11, 1975	United kingdom	H04H 1/00	X	
	1,523,307	August 31, 1978	Great Britain	H03K 5/08	X	
	1,543,502	April 4, 1979	United Kingdom	G08B9/00	X	
	1,582,563	January 14, 1981	United Kingdom	G08B9/00	X	
	1,584,111	February 4, 1981	United Kingdom	G08B9/00	X	
	2,051,527	January 14, 1981	Great Britain	G06F 3/153	X	
	2,067,379	July 22, 1981	Great Britain	H04L 1/24	X	
	2,823,175	November 29, 1979	German	G06F 3/12		X
	24 53 441	May 13, 1976	Germany	H04L 9/00		X
	80/02901	December 24, 1980	France	H04N 7/16		X
	857,862	January 4, 1961	United Kingdom	40 (1)	X	
	WO80/00292	February 21, 1980	Japan	H04N9/16		X

OTHER DOCUMENTS

Examiner Initial	Author, Title, Date, Pertinent Pages, Etc.
	Hanas et al.,"An Addressable Satellite Encryption System For Preventing Signal Piracy", November 1981, pp. 631-635.
	National Cable Television Association Executive Seminar Series, Videotex Services, October 1980, pp. 1-155.
	Kokado et al.,"A Programmable TV Receiver", February 1976, pp. 69-82.
	J. Hedger et al., "Telesoftware-Value Added Teletext",August 1980, pp. 555-567.
	Marti , B.,"The Concept Of A Universal "Teletext" June 1979, pp.1-11
	Article re: America's Talk-Back Television Experiment: Qube
	Article re: "Teletext-Applications in Electronic Publishing"
	Article re: A Description of the Broadcast Telidon System, IEEE Transactions on Consumer Electronics, Vol. CE - 26, August 1980
	Article re: EPEOS--Automatic Program Recording System by G. Degoulet
	Article re: Teletext signals transmitted in UK...
	Article re: New services offered by a packet data broadcasting system, no. 149 February 1975
	Article re: Philips TV set indicates station tunign and color settings on screen, Electronics, Nov. 27, 1975
	Vincent,A.et al., "Telidon Teletest System Field Trials" IEEE Transactions on Consumer Electronics, Vol. CE - 27, No. 3, Aug. 1981, pp. 530-335
	Rzeszeewski, T.,"A New Telletex Channel"
	Kaplinsky, C.H., "The D**(2)B A One Logical Wire Bus for Consumer Applications" 1981
	Sechet, C., "Antiope Teletext Captioning" 1980
	Lambert, O. et al., "Antiope and D.R.C.S." 1980
	"LSI Circuits for Teletext and Viewdata -- The Lucy Generation" published by Mullard Limited, Mullard House (1981)
	Nicholas Negroponte in SID 80 Digest titled, "17.4/10:25 a.m.: Soft Fonts", pp. 184-185
	IEEE Consumer Electronics July 1979 issue from Spring Conference titled, "Consumer Text Display Systems", pp. 235-429
	Videotext '81 published by Online Conferences Ltd., for the May 20-22, 1981 Confernece, pp. 1-470
	"Teletext and Viewdata Costs as Applied to the U.S. Market" Published by Mullard House (1979), pp. 1-8
	Dalton,C.J., "International Broadcasting Convention" (1968), Sponsors: E.E.A., I.E.E., I.E.E.E., I.E.R.E., etc.
	Shorter, D.E.L., "The Distribution of Television Sound by Pulse-Code Modulation Signals Incorporated in the Video Waveform"
	Chorky, J.M., Shorter, D.E.L., "International Broadcasting Convention" (1970), pp. 166-169
	"The Implementation of the Sound-in-Sync project for Eurovision (Feb. 1975), pp. 18-22, No. 140 E.B.U. Review
	Maegele, Manfred, "Digital Transmissions of Two Television Sound Channels in Horizontal Banking", pp. 68-70
	Weston, J.D., "Digital TV Transmission for the European Communications Satellite" (1974), pp. 318-325
	Golding, L., "A 15 to 25 Mhz Digital Television System for Transmission of Commercial Color Television" (1967), pp. 1-26
	Huth, Gaylord K., "Digital Television System Design Study: Final Report (11/28/76), prepared for NASA Lyndon B. Johnson Space Center

Examiner Initial	Author, Title, Date, Pertinent Pages, Etc.
	Weston, J.D., "Transmission of Television by Pulse Code modulation", Electrical Communication (1967), pp. 165-172
	Golding, L., "F1-Ditec-A-Digital Television Communications System for Satellite Links," Telecommunications Numeriques Par Satellite
	Haberle, H. et al.,"Digital TV Transmission via Satellite", Electrical Communications (1974)
	Dirks, H. et al., "TV-PCM6 Integrated Sound and Vision Transmission System, Electrical Communication (1977), pp. 61-67
	Talygin, N.V. et al., The "Orbita" Ground Station for Receiving Television Programs Relayed by Satellites, Elecktrovinz, pp. 3-5
	Voorman, J.O. et al., A one-chip Automatic Equalizer for Echo Reduction in Teletext , IIEE Transactions on Consumer Electronics, pp. 512-529
	MacKenzie, G.A., A Model for the UK Teletext Level 2 Specification (Ref: GTV2 242 Annex 6" based on the ISO Layer model
	Chambers, J.P., A Domestic Television Program Delivery Services, British Broadcasting Corporation, pp. 1-5
	McKenzie, G.A., UK Teletext - The Engineering Choices, Independent Broadcasting Authority, pp. 1-8
	Adding a new dimension to British television, Electronic Engineering (1974)
	Jones, Keith, The Development of Teletext, pp. 1-6
	Ando, Heiichero et al., Still-Picture Broadcasting - A new Informational and Instructional Broadcasting System, IEEE Transactions on Broadcasting (1973), pp. 68-76
	B.B.C.I.B.A., Specification of Standards for information transmission by digitally coded signals in the field - blanking interval of 625-line systems (1974), pp. 5-40
	Tarrant, D.R., "Teletext for the World" (date unknown)
	Clifford, Colin et al., "Microprocessor Based, Software Defined Television Controller", IEEE Transaction on Consumer Electronics (1978), pp. 436-441
	Hughes, William L. et al., "Some Design Considerations for Home Interactive Terminals", IEEE Transactions on Broadcasting (1971)
	Mothersdale, Peter L. , "Teletext and viewdata: new information systems using the domestic television receiver", Electronics Record (1979), pp. 1349-1354
	Betts, W.R., "Viewdata: the evolution of home and business terminals", PROC.IEE (1979), pp. 1362-1366
	Hutt, P.R., "Thical and practical ruggedness of UK teletext transmission", PROC.IEE (1979), pp. 1397-1403
	Rogers, B.J., "Methods of measurement on teletext receivers and decoders", PROC.IEE (1979), pp.1404-1407
	Green, N., "Subtitling using teletext service - technical and editorial aspects", PROC.IEE (1979), pp. 1408-1416
	Chambers, M.A., "Teletext - enhancing the basic system", PROC.IEE (1979), pp. 1425-1428
	Crowther, G.O., "Adaptation of UK Teletex System for 525/60 Operation", IEEE Transactions on Consumer Electronics (1980), pp. 587-596
	BBC, BBC Microcomputer: BBC Microcomputer with Added Processor and Teletex Adaptor (Manual)
	Green, N.W., "Picture Oracle," On Independent Television Companies Association Limited Letterhead
	National Captioning Institute, Comments on the Matter of Amendment of Part 73, Subpart E. of the Federal Communications Rules Government Television Stations to Authorize Teletext (before F.C.C.) 03-26-81
	Balchin, C., "Videotext and the U.S.A.", I.C. Product Marketing Memo

Examiner Initial	Author, Title, Date, Pertinent Pages, Etc.
	EIA Teletext SubCommittee Meetings, Report on USA Visit
	Brighton's Experience with Software for Broadcast (Draft) 1981
	AT&T, "Videotex Standard Presentation Level Protocol", 1981
	IBA Technical Review of Digital Television by F. Howard Steele, pp. 1-64, 6/1973
	National Cable Television Association report, "Videotex Services" given at Executive Seminar,pp. iii-155
	Electronic Industries Association - Teletext Subcommittee Task Group A - Systems Minutes of Meeting 3/30/81 at Zenith plus attachments
	Electronic Industries Association - Teletext Subcommittee Task Group A -Systems Interim Report, 3/30/81 by Stuart Lipoff, Arthur D. Little Inc.
	Minutes of Electronic Industries Association Teletext Subcommittee Task Force B - Laboratory & Field Tests 3/30/81
	National Captioning Institute Report, "The 1980 Closed-Captioned Television Audience"
	Electronic Industries Assoc. - Teletext Subcommittee - Steering Committee Minutes of Meeting on 3/31/81
	National Cable Television Association report, "Videotex Services" October 1980
	Scala Info Channel Advertisement, "The Art of Conveying A Message"
	Zenith Corporation's Z-Tac Systems information includes Z-tac specifications, access list, etc. (varous articles)
	Report by Cablesystems Engineering Ltd. on, "Zenith Addressable System and Operating Procedures" and Advertising documents, Nov. 1981
	Notations by Walt Ciciora dated 8/19/81 referring to Virtext figures, 8/19/81
	"Preliminay Specification for Basic Text" Stamped Zenith Confidential, 2/17/81
	Petition to FCC dated 3/26/81 titled, "Petition for Rulemaking of Unighted Kingdom Teletext Industry Goup," also 1 page of handwritten notes from Walter Ciciora
	"Enhanced Computer Controlled Teletext for 525 Line Systems (Usecct) SAA 5245 User Manual" report by J.R. Kinghorn, August 1, 1981
	"Questions and Answers about Pay TV" by Ira Kamen, 1973
	Oak Industries 1981 Annual Report
	Article, "50 Different Uses For At Home 2-Way Cable TV Systems" by Morton Dubin
	Derwent Info Ltd. search. Integrated broadcasting & Computer Processing system. Inventor J. Harvey/J. Cuddihy
	"Relevant papers for Weather Channel V PMMC"
	Letter to Peter Hatt Re: BVT: Advisory UK Industry Contact Group, 6/24/81
	Memo RE: Next Moves by British teletext and video proponents toward gaining support of systems in US.
	Memo - Re: British Teletext -- ABC
	Notes to Section 22.4: Simple Block Encipherment Algorithm
	Internal Correspondence to John Meyer from Mike Clader RE: Teletext Business Posture, Sept. 18, 1981 and Internal Correspondence to Mike Calder from John Nemec RE: Trips to Zenith, Sept. 9, 1981
	Kahn, et al., "Advances in Packet Radio Technology,"..... Proceedings of the IEEE, Vol. 66, No. 11, Nov. (1978) pp. 1468-1495
	Clifford, C., "A Universal Controller for Text Display Systems," IEEE Transactions on Consumer Electronics, (1979) pp. 424-429
	Harden, B., "Teletext/Viewdata LSI," IEEE Transactions on Consumer Electronics, (1979), pp. 353-358
	Bown, H. et al., "Comparative Terminal Realizatins with Alpha-Geometric Coding," IEEE Transaction on Consumer Electronics, (1980), pp. 605-614

Examiner Initial	Author, Title, Date, Pertinent Pages, Etc.
	Crowther, "Dynamically Redefinable Character Sets--D.R.C.S.," IEEE Transaction on Consumer Electronics, (1980), pp. 707-716
	Chambers, John et al., "The Development of a Coding Hierarchy for Enhanced UK Teletext," IEEE Transaction on Consumer Electronics, (1981), pp. 536-540
	In Re Reexamination of U.S. Patent No. 4,706,121
	U.S. Patent Application by T. Diepholz (Serial No. 266900), filing date 5-26-81
	88908836.5 International Application to John C. Harvey
	Kruger, H. E., "Memory Television, The ZPS Digital Identification System." pp. 1 - 9

EXAMINER	DATE CONSIDERED

EXAMINER:Initial if citation considered, whether or not citation is in conformance with M.P.E.P. 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant(s).